Evaluation Report
A/N 2633
G# 909
Safeway Stores, 709 Lincoln Rd. West, Vallejo

Background

RHL Design Group on behalf of Safeway has submitted this application to increase the throughput limit at G909. No other hardware modifications (except for those described below) are being proposed at this time. This station is currently conditioned to 3.1 Mmgal/yr per a risk screen performed under A/N 2633. As this was a new station, the baseline was set at 0. This station is equipped with two 20K gas tanks (one split 10K/10K, both gas), 8 triple product Husky gas nozzles, with Phil Tite EVR Phase I and Healy 800 ORVR Phase II vapor recovery.

RRMs

Safeway has proposed to implement the Risk Reduction Measures (RRMs) for Healy 800 Phase II equipment at this station. A new risk screen was performed using the following emissions factors:

Operation	% change	Controlled VOC, #/Mgal	Benzene, #/MMgal
Loading	none	0.084	0.252
Breathing	75% reduction	0.00625	0.0188
Refueling	56% reduction	0.32	0.96
Spillage	24% reduction	0.32	3.20
TOTAL	**34% reduction**	**0.73**	**4.43**

Results indicate that a 5.43 million gal/yr. throughput is acceptable under the District's Risk Management Policy upon implementation of the RRMs for the Healy 600 ORVR/800 Phase II system.

Emissions Increase

VOC:

(5.43 MM gal/yr x 0.73 #VOC/Mgal) - (3.1 MM gal/yr x 1.27 #VOC/Mgal)

= 26.9 #/yr
= **.07 #/day VOC**

Benzene:

(5.43 MM gal/yr x 4.43 #Benzene/MM gal) - (3.1 MM gal/yr x 6.75 #Benzene/MM gal)

= 3.1 #/yr
= **.009 #/day benzene**

Schools:

The station is within 1000 feet of Franklin Middle School. There are no other schools within ¼ mile of this station.

Public Notice:

Before this throughput increase can be approved, a 30-day public comment period will be held. Notice describing the project and announcing the public comment period will be mailed to the parents of students attending the above schools and

people living within 1000 feet of the station. The cost of preparing and distributing this notice will be borne by the applicant.

Risk Management:

This project will increase emission of benzene a toxic air contaminant. The maximum increased risk from these emissions is as follow:

Residence	10 per million
School	0.3 per million

These increased risks are acceptable under the District Rick Management Policy provided the source utilizes TBACT.

TBACT:

The increased risk from this project exceeds 1 per million, triggering the use of TBACT equipment. TBACT for GDFs is considered the use of CARB-certified Phase I and Phase II vapor recovery equipment. State law prohibits the District from requiring vapor recovery equipment that is not-CARB certified.

New Source Review:

This station has the potential to emit more than 10# of VOC in a single day, triggering the BACT requirements of Regulation 2-2-301.

BACT for GDFs is considered the use of CARB-certified Phase I and Phase II vapor recovery equipment. State law prohibits the District from requiring vapor recovery equipment which is not-CARB certified.

Emissions from this station will remain less than 15 tpd. Per Regulation 2-2-302, offsets are not required.

Compliance:

This station is equipped with Two-point Phil-Tite Phase I (E O VR-101) and Healy 600 ORVR/800 Phase II (E O G-70-191) vapor recovery equipment. Both systems are CARB certified, satisfying requirements for BACT and TBACT. This equipment also complies with Sections 8-7-301 and 302.

Recommendation

Recommend that an A/C be issued for the above station to the following conditions:

1. All gasoline storage tank vents at this station shall be manifolded to a single PV valve with a CARB-certified leak rate of no more than 0.05 CFH.
2. Only dispensers configured for "unihose" gasoline nozzles (a single nozzle delivering multiple gasoline grades) may be used at this station.
3. All new and replacement nozzles shall meet the latest effective EVR standards for liquid retention and spitting.
4. All tanks must be equipped with an EVR-certified Phase I system.
5. An EVR-certified In-Station Diagnostics (ISD) system shall be installed at this station within six months of the date they become commercially available.
6. The station shall conduct a Dynamic Back Pressure Test (ST-27), a Pressure Decay Test (ST-30) and an A/L test (ST-39 or TP 201.5) at least once every

12 calendar months. Testing must be performed between March 1st and June 15th.

7. The station shall conduct and pass all tests required to be performed periodically by the applicable CARB Phase I EVR Executive Order at least once every 24 calendar months. Testing must be performed between March 1st and June 15th.
8. All Phase I adaptor caps, vapor adaptors, and product adaptors shall be visually inspected at least once every three months.
9. Containment boxes shall be inspected for standing liquid gasoline no later than 8 hours after a bulk delivery. Residual gasoline shall be removed immediately via the Phase I drain valve or a gasoline-resistant hand pump.
10. Dispensing rate shall be maintained between 7.0 and 10.0 gpm. Nozzle dispensing rate shall be tested quarterly using GDF INSPECTION PROCEDURE-IP-05. Failures shall be repaired within 72 hours or locked "Out of Service" until repairs are made.
11. Nozzle spouts shall be inspected for damage both visually and using the "ring test" on a monthly basis. Defects shall be repaired within 72 hours or locked "Out of Service" until repairs are made.
12. Nozzle mini-boots, gasoline hoses, and hose breakaways shall be visually inspected on a monthly basis. Defects shall be repaired within 72 hours or the affected nozzle locked "Out of Service" until repairs are made.
13. Nozzle vapor check valves shall be tested quarterly using GDF INSPECTION PROCEDURE IP-03. Failures shall be repaired within 72 hours or locked "Out of Service" until repairs are made.
14. Upon development of an appropriate procedure, vapor pump operation shall be tested quarterly using a District-approved inspection procedure. Failures shall be repaired within 72 hours or locked "Out of Service" until repairs are made.
15. The station shall maintain a "Customer Complaint Log" and investigate each emissions-related complaint within 96 hours. Defects shall be repaired within the 72 hours of discovery, or locked "Out of Service" until repairs are made.
16. Signs shall be posted at each island offering "self service" instructing customers in the proper operation of the vapor recovery nozzles at the station. These signs shall include prohibitions against "topping off" and using the nozzle "upside down."
17. Station shall have readily available (e.g., at cash register) instruction brochures for customers to educate them on the proper method to refuel their vehicles.
18. The station shall submit an annual report summarizing all testing and maintenance activities at the facility. This report shall be submitted to the District with 30 days after the close of the 12-month period covered by the report.

A P/O with the higher throughput will be issued once the station has passed the required initial tests and certifies that all the above modifications and procedures are in place.

By _____ date_____
Scott Owen
Supervising AQ Engineer